

C-XXX-XXXX

**TEST FOR MEASUREMENT  
OF  
STUDENT ACHIEVEMENT  
MAINTENANCE**

**2 kW MILITARY TACTICAL GENERATOR SET  
MEP-531A - 120 VAC 60 HZ  
MEP-501A - 28 VDC**

**WRITTEN TEST**

**MASTER TEST BOOKLET**

TEST INSTRUCTIONS FOR THE PROCTOR

PRIOR TO START OF TESTING:

Tell the students that use of reference materials (e.g., Student Guide, Maintenance Manuals) is permitted.

There is only one correct answer for each test item.

Distribute the Test Booklet face down.

Announce time of test (.5 hours). Each item is worth 5 points.

Direct students to turn over the Test Booklet. Read the directions with the students.  
Instruct the students to begin the test.

Tell the students to bring Test Booklet to you when they are finished with the test and leave the room.

AT THE COMPLETION OF TESTING:

Grade the test using the Test Answer Key in the Master Test Booklet. Multiply the items answered correctly by 5 to calculate the final score (e.g.,  $15 \times 5 = 75\%$ ).

Have students return to the classroom and review the correct answers to the test items.

**2KW Generator Maintenance Test**

1. The generator set is designed to be carried by \_\_\_\_\_?
  - a. Four persons
  - b. One person
  - c. A forklift
  - d. Two people
2. A \_\_\_\_\_ is used to manually start the engine.
  - a. Start-Preheat/Preheat/Off/Start switch
  - b. NATO slave receptacle  
Starter
  - d. Recoil starting device
3. The generator set is powered by a \_\_\_\_\_ .
  - a. 4 cylinder, 4 cycle diesel engine
  - b. 1 cylinder, 4 cycle gasoline engine  
1 cylinder, 4 cycle diesel engine  
2 cylinder, 2 cycle diesel engine
4. The MEP - 531A generator set is equipped with a \_\_\_\_\_ alternator.
  - a. 28 VDC
  - b. 120 VAC, three phase
  - c. 120 VAC, single phase
  - d. 12 VDC
5. The fuel tank has a capacity to provide 4.8 hours of operation at \_\_\_\_\_ load.
  - a. 50%
  - b. 100%  
75%  
80%

6. Air is drawn into the engine cylinder during the \_\_\_\_\_.  
a. Compression stroke  
b. Exhaust stroke  
Power stroke  
Intake stroke
7. The amount of fuel delivered to the fuel injector from the fuel injection pump is controlled by the \_\_\_\_\_.  
a. Generator control unit  
b. Fuel injector  
c. Governor  
d. Fuel filter
8. The electrical starting system is energized by 12 VDC power received through the NATO's slave receptacle.  
a. True  
b. False
9. The Start-Preheat /Preheat/Off/Start switch is a \_\_\_\_\_ position switch for electric starting of the generator set.  
a. Four  
b. Three  
c. Two  
d. One
10. The \_\_\_\_\_ increases or decreases voltage across the power windings to match load demand.  
a. Dynamo  
b. Voltage regulator  
Voltmeter  
Generator control unit
11. The voltage adjust potentiometer adjusts the \_\_\_\_\_.  
a. Engine speed  
b. Frequency setpoint  
c. Voltage setpoint  
d. Injection pump

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**12.** The \_\_\_\_\_ connects/disconnects power to output load terminals.

- a. Generator control unit
- b. Voltage regulator
- c. Circuit breaker diode
- d. On-Off load circuit breaker

**13.** The load terminal board has \_\_\_\_\_ output load terminals.

- a. Two
- b. Four
- c. Aluminum
- d. Plastic

**14.** The dynamo produces \_\_\_\_\_ power for the generator control system.

- a. 120 VAC
- b. 28 VDC
- c. 12 VDC
- d. 40-50 VAC

**15.** The low oil pressure switch activates engine shutdown when oil pressure falls to \_\_\_\_\_.

- a.  $6 \pm 1$  psi
- b.  $25 \pm 5$  psi
- c.  $10 \pm 2$  psi
- d.  $15 \pm 3$  psi

**16.** Repair parts for the generator set are found in TM 9-6115-673-13&P Appendix B.

- a. True
- b. False

**17.** When electric starting the generator set, do not crank the engine more than \_\_\_\_\_ seconds.

- a. 15
- b. 10
- c. 20
- d. 5

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**18.** The \_\_\_\_\_ releases compression from the engine cylinder to allow easy pulls of recoil starter.

- a. Engine Run lever
- b. Engine Stop lever
- c. Decompression lever
- d. Discharge varistor

**19.** Prior to starting the generator set, the operator must perform \_\_\_\_\_ PMCS procedures.

- a. Unit level
- b. Before
- c. After
- d. During

**20.** The ON-OFF load circuit breaker should be positioned to ON prior to starting the generator set.

- a. True
- b. False

**21.** Generator set Unit level troubleshooting for “Engine will not Start (manual starting)” is found in \_\_\_\_\_.

- a. Table 1-1
- b. Table 4-2
- c. Table 3-1
- d. Table 4-1

**22.** The Resilient Mounts are replaced \_\_\_\_\_.

- a. Every 1500 hours
- b. Every 1000 hours
- c. Every 3000 hours
- d. Every 2000 hours

**23.** The engine lube oil is changed \_\_\_\_\_.

- a. Every 25 hours
- b. Only when needed
- c. Every 100 hours
- d. Every 150 hours

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**24.** Alternator brushes should always be replaced as a set.

- a. True
- b. False

**25.** The first step in surface preparation for corrosion control is \_\_\_\_\_ the surface.

- a. Sanding
- b. Cleaning
- c. Painting
- d. Priming

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TEST ANSWER KEY/TEST ITEM CROSS REFERENCE SHEET

Item No.	Answer	Reference
Q1.	a	P. 1-5
Q2.	d	P. 2-1
Q3.	c	P. 1-5
Q4.	c	P. 1-10
Q5.	b	P. 1-5
Q6.	d	P. 1-11
Q7.	c	P. 1-11
Q8.	b	P. 1-16
Q9.	a	P. 2-6
Q10.	b	P. 1-18
Q11.	c	P. 1-18
Q12.	d	P. 1-20
Q13.	a	P. 2-7
Q14.	d	P. 5-66
Q15.	d	P. 1-26
Q16.	b	P. F-1
Q17.	b	P. 2-23
Q18.	c	P. 2-1
Q19.	b	P. 2-21
Q20.	b	P. 2-21
Q22.	d	P. 4-14
Q23.	c	P. 4-10
Q24.	a	P. 4-20
Q25.	b	MIL-HDBK-729